REMARKS

The applicants appreciate the acknowledgement of the claim for priority under section 119 and the notice that the certified copy of the priority document has been received.

Also, the applicants acknowledge receipt of the initialed copy of the form PTO 1449 which was filed on 1 April 2004.

Claims 1-21 are pending. Claims 14-21 have been withdrawn. The applicants respectfully request reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claims 1, 6, 8, 9, 12 and 13 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent Pub. No. 2002/0189859, Shiraishi ("Shiraishi"). Dependent claims 4, 5, 10 and 11 were rejected as being unpatentable over Shiraishi in view of U.S. Patent Pub. No. 2002/0195420, Obert ("Obert"). Insofar as the rejections may be applied to the claims as amended, the rejections are respectfully traversed for reasons including the following, which are provided by way of example.

Claim 1 has been amended to recite that "the conductive pattern is disposed nearer to the electrode than any other conductive pattern disposed over or under the electrode, and the conductive pattern covers all of a periphery of the electrode." Independent claim 8 has been amended to recite that "the thin film resistor is directly connected to the conductive pattern through the conductive material in the hold, the conductive pattern being disposed over or under the resistor, the conductive pattern being disposed nearer to the thin film resistor than any other conductive pattern over or under the resistor, and wherein all of a periphery of the tin film resistor is covered with the conductive pattern." (See, e.g., FIG. 2B and accompanying description in specification.)

The specification recognizes the problem that the thin film resistor easily cracks near the periphery of an electrode, when a resin film is laminated to manufacture a multi-layer printed circuit board (page 3, lines 5-8).

Independent claim 1 recites in combination, for example, "a thin film resistor embedded in the resin substrate; and an electrode disposed on the thin film resistor, wherein the thermoplastic resin film includes a conductive pattern made of metallic film, and wherein the conductive pattern is disposed over or under the electrode, the conductive pattern is disposed nearer to the electrode than any other conductive pattern over or under the electrode, and the conductive pattern covers all of a periphery of the electrode." Independent claim 8 recites in combination, for example, "a thin film resistor embedded in the resin substrate, wherein the thermoplastic resin film includes a conductive pattern, which is disposed on a surface of the resin film and made of metallic film, wherein the resin substrate includes a hole filled with a conductive material, wherein the thin film resistor is directly connected to the conductive pattern through the conductive material in the hole, the conductive pattern being disposed over or under the resistor, the conductive pattern being disposed nearer to the thin film resistor than any other conductive pattern over or under the resistor, and wherein all of a periphery of the thin film resistor is covered with the conductive pattern."

Accordingly, a periphery of the electrode is covered with the conductive patterns. Thus, when the thermoplastic resin films are heated and pressurized, the conductive pattern prevents the fluidized thermoplastic resin from moving toward the periphery of the electrode. Therefore, stress to the thin film resistor is limited so as to prevent cracking. (Specification, page 12, lines 8-20.)

On the other hand, without conceding that Shiraishi discloses any feature of the present invention, Shiraishi is directed to a printed circuit board and manufacturing method. According

to Shiraishi, a thin film resistor (33) is disposed between two electrodes (32). Also, one end of the electrode (32) is covered with the nearest conductive pattern (22), and the other end of the electrode (32) is not covered with the nearest conductive pattern (22).

The office action asserts that Shiraishi anticipates the invention as claimed. To the contrary, Shiraishi fails to set forth each and every element found in the claims. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Shiraishi fails to teach or suggests, for example, "an electrode disposed on the thin film resistor." (See, e.g., claim 1.) To the contrary, in Shraishi, the thin film resistor (33) is disposed between two electrodes (32).

Furthermore, Shiraishi fails to teach or suggest that "the conductive pattern is disposed over or under the electrode, the conductive pattern is disposed nearer to the electrode than any other conductive pattern over or under the electrode, and the conductive pattern covers all of a periphery of the electrode." (See, e.g., claim 1.) In Shiraishi, to the contrary, the nearest conductive pattern (22) disposed over or under the electrode (32) covers only one end of the electrode (32).

Moreover, Shiraishi fails to teach or suggest that "all of a periphery of the thin film resistor is covered with the conductive pattern," "the conductive pattern being disposed nearer to the thin film resistor than any other conductive pattern over or under the resistor." (See claim 8.) According to Shiraishi, contrariwise, the conductive pattern (22) disposed over or under the

electrode (32) covers only one end of the electrode (32).

In addition, Shiraishi fails to teach or suggest that "the thin film resistor is directly connected to the conductive pattern through the conductive material in the hole, the conductive pattern being disposed over or under the resistor." (See claim 8.) To the contrary, in Shiraishi, the connection between the conductive pattern and the thin film resistor is different; in Shiraishi, the thin film resistor (33) is connected to the nearest conductive pattern (22) through the electrode (32) and the conductive material (50) in the hole.

Shiraishi fails to teach or suggest, for example, these elements recited in independent claims 1 and 8. It is respectfully submitted therefore that claims 1 and 8 are patentable over Shiraishi.

For at least these reasons, the combination of features recited in independent claims 1 and 8, when interpreted as a whole, is submitted to patentably distinguish over the prior art. In addition, Shiraishi clearly fails to show other recited elements as well.

The rejected dependent claims are deemed to be allowable over Shiraishi alone or in combination with other references due to the reasons provided above, the claims' dependency from independent claims 1 and 8, and additional features the claims recite in combination.

Claims 1-3, 6 and 7 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent Pub. No. 2005/0186768, Sugaya ("Sugaya"). Insofar as the rejection can be applied to the claims as amended, the examiner is respectfully requested to reconsider and withdraw the rejection for reasons including the following, which are provided by way of example.

Without conceding that Sugaya discloses any feature of the present invention, Sugaya is directed to a wiring substrate. According to Sugaya, a thin film resistor (2703) is disposed between the electrode (cited by the examiner) and the reference electrode (2702) (see FIG. 25).

The office action asserts that Sugaya discloses the invention as claimed. To the contrary, Sugaya fails to teach or suggest the invention, as presently claimed, when the claims are considered as a whole. Sugaya fails to teach or suggest, for example, "an electrode disposed on the thin film resistor." To the contrary, in Sugaya, the thin film resistor is disposed between the electrode (element E in marked-up FIG. 25, below) and the reference electrode (2702). Please see Sugaya, FIG. 25, reproduced below with mark-up.

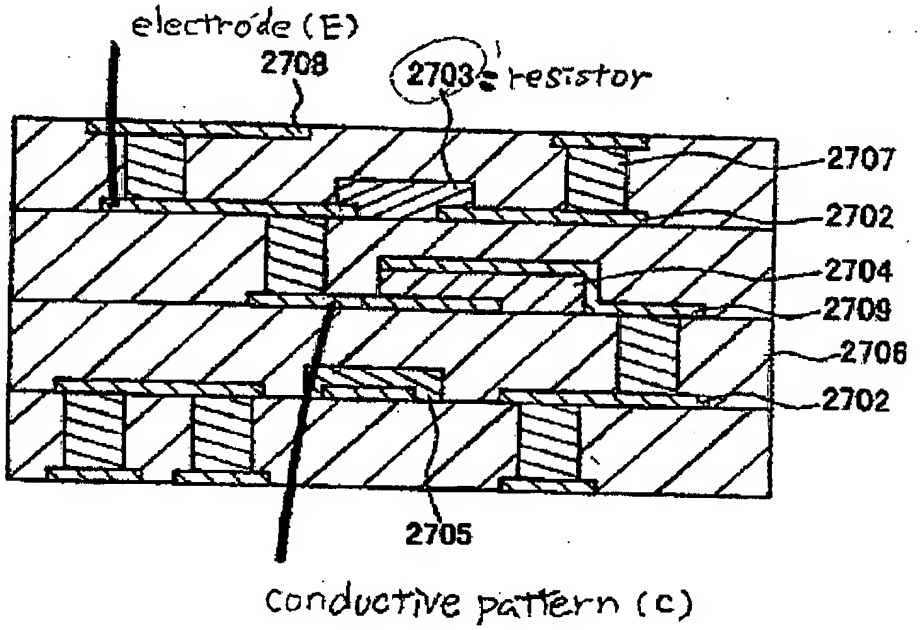


FIG. 25'

Moreover, in amended independent claim 1, as compared with Sugaya, "the conductive pattern is disposed over or under the electrode, the conductive pattern is disposed nearer to the electrode than any other conductive pattern." In Sugaya, however, the nearest conductive pattern of the electrode (E) is not the electrode directly under capacitor 2704 (C), but is pattern 2709.

Furthermore, even if the nearest conductive pattern in Sugaya is considered to be pattern (C) (which applicants vigorously deny), Sugaya fails to teach or suggest that conductive pattern

(C) disposed over or under the electrode (E) covers all of a periphery of the electrode (E). To the contrary, according to Sugaya, one end of the electrode (E) is not covered with the conductive pattern (C).

Sugaya fails to teach or suggest, for example, these elements recited in independent claim 1. It is respectfully submitted therefore that claim 1 is patentable over Sugaya.

For at least these reasons, the combination of features recited in independent claim 1, when interpreted as a whole, is submitted to patentably distinguish over the prior art. In addition, Sugaya clearly fails to show other recited elements as well.

With respect to the rejected dependent claims, applicant respectfully submits that these claims are allowable not only by virtue of their dependency from independent claim 1, but also because of additional features they recite in combination.

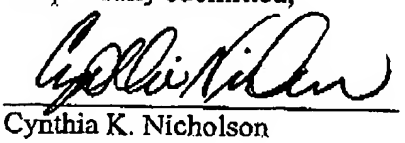
Applicants respectfully submit that, as described above, the cited prior art does not show or suggest the combination of features recited in the claims. Applicants do not concede that the cited prior art shows any of the elements recited in the claims. However, applicants have provided specific examples of elements in the claims that are clearly not present in the cited prior art.

Applicants strongly emphasize that one reviewing the prosecution history should not interpret any of the examples applicants have described herein in connection with distinguishing over the prior art as limiting to those specific features in isolation. Rather, for the sake of simplicity, applicants have provided examples of why the claims described above are distinguishable over the cited prior art.

In view of the foregoing, the applicants submit that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

If there are any problems with the payment of fees, please charge any underpayments and credit any overpayments to Deposit Account No. 50-1147.

Respectfully submitted,



Cynthia K. Nicholson
Reg. No. 36,880

Posz Law Group, PLC
12040 South Lakes Drive, Suite 101
Reston, VA 20191
Phone 703-707-9110
Fax 703-707-9112
Customer No. 23400